CLAIMS

1. An additional information inserting apparatus for superimposing additional information to main information signals, comprising:

means for generating first insertion signals from the additional information and generating second insertion signals from the additional information; and

means for superimposing the respective insertion signals generated from the insertion signal generating means to the main information signals.

2. The additional information inserting apparatus as set forth in Claim 1, wherein the superimposing means superimposes the first insertion signals and the second insertion signals to the main information signals such that the first insertion signals are superimposed to first intervals of the main information signals and the second insertion signals are superimposed to second intervals of the main information signals, and that the first intervals and the second intervals exist alternately along time direction of the main information signals.

3. The additional information inserting apparatus as set forth in Claim 2, wherein the superimposing means superimposes the respective different insertion signals to the main information signals every predetermined period.

4. The additional information inserting apparatus as set forth in Claim 2, wherein the superimposing means superimposes the respective different insertion signals to the main information signals every predetermined number of frames or every predetermined number of fields.

5. The additional information inserting apparatus as set forth in Claim 1, wherein the superimposing means superimposes the first insertion signals and the second insertion signals to a plurality of regions of the main information signals, which regions are obtained by dividing signal units constituting the main information signals.

6. The additional information inserting apparatus as set forth in Claim 3, wherein the main information signals are image signals, and signal units of the main information signals are frames or fields constituting the image signals.

7. The additional information inserting apparatus as set forth in Claim 1, wherein the insertion signal generating means generates the first insertion signals and the second insertion signals from identical additional information.

8. The additional information inserting apparatus as set forth in Claim 1, wherein the insertion signal generating means generates the first insertion signals and the second insertion signals by the use of key information, and generates different insertion signals from the additional information by varying the key information to be used.

9. The additional information inserting apparatus as set forth in Claim 1, wherein the insertion signal generating means generates different insertion signals from the additional information by varying the encoding method.

10. An additional information inserting method for superimposing additional information to main information signals, comprising the steps of:

generating first insertion signals from the additional information and generating

second insertion signals from the additional information; and

superimposing the respective insertion signals generated in the insertion signal generating step to the main information signals.

11. The additional information inserting method as set forth in Claim 10, wherein the superimposing step superimposes the first insertion signals and the second insertion signals to the main information signals such that the first insertion signals are superimposed to first intervals of the main information signals and the second insertion signals are superimposed to second intervals of the main information signals, and that the first intervals and the second intervals exist alternately along time direction of the main information signals.

12. The additional information inserting method as set forth in Claim 11, wherein the superimposing step superimposes the respective different insertion signals to the main information signals every predetermined period.

13. The additional information inserting method as set forth in Claim 11, wherein the superimposing step superimposes the respective different insertion signals to the main information signals every predetermined number of frames or every predetermined number of fields.

14. The additional information inserting method as set forth in Claim 10, wherein the superimposing step superimposes the first insertion signals and the second insertion signals to a plurality of regions of the main information signals, which regions are obtained by dividing signal units constituting the main information signals.

15. The additional information inserting method as set forth in Claim 12, wherein the main information signals are image signals, and signal units of the main information signals are frames or fields constituting the image signals.

16. The additional information inserting method as set forth in Claim 10, wherein the insertion signal generating step generates the first insertion signals and the second insertion signals from identical additional information.

17. The additional information inserting method as set forth in Claim 10, wherein the insertion signal generating step generates the first insertion signals and the second insertion signals by the use of key information, and generates different insertion signals from the additional information by varying the key information to be used.

18. The additional information inserting method as set forth in Claim 10, wherein the insertion signal generating step generates different insertion signals from the additional information by varying the encoding method.

19. A recording medium which has recorded therein signals being main information signals having superimposed thereto additional information, wherein first insertion signals generated from the additional information and second insertion signals generated from the additional information are multiplexed and superimposed to the main information signals.

20. A recording medium which has recorded therein signals being main information signals having superimposed thereto additional information, wherein the recording medium is manufactured by undergoing the steps of:

generating first insertion signals from the additional information and generating second insertion signals from the additional information;

superimposing the respective insertion signals generated in the insertion signal generating step to the main information signals; and

recording signals having superimposed thereto the respective insertion signals generated in the insertion signal superimposing step to the recording medium.